FACTSHEET
Standard Cryoprecipitate
Information for Healthcare Professionals
The indications for transfusing cryoprecipitate are limited and specific.
Please transfuse appropriately.

Standard Cryoprecipitate

Cryoprecipitate contains concentrated Factor VIII:C, von Willebrand factor, fibrinogen, Factor XIII, and fibronectin and is produced by further processing of Fresh Frozen Plasma (FFP). Clinically it is used to replace fibrinogen.

As with FFP, the plasma from which the cryoprecipitate was produced has been leucodepleted and was obtained from a male donor to reduce the risk of transfusion-related acute lung injury (TRALI). Cryoprecipitate should be stored at a core temperature of -25°C or below for up to 36 months.

Clinical indications for use of cryoprecipitate in adults*

- Clinically significant bleeding and a fibrinogen level <1.5g/L (<2g/L in obstetric bleeding)
- Fibrinogen level is <1g/L and pre-procedure
- Bleeding associated with thrombolytic therapy
- Inherited hypofibrinogenaemia where fibrinogen concentrate is not available

(*National Blood Transfusion Committee Indication Codes for Transfusion, 2016.)
**Presentation and dosage of cryoprecipitate**

Cryoprecipitate is available as a single unit, or as a pooled product made up of five single units. Pooled units are more commonly used to treat adult patients.

The adult therapeutic dose is two pooled units, or one single unit per 5-10kg body weight, dependant on the degree of fibrinogen deficiency. Paediatric dosing is 5-10mL/kg.

**Practical instructions for the use of Cryoprecipitate**

Once thawed, Cryoprecipitate must not be refrozen and should be used immediately. If delay is unavoidable the component should be stored at ambient temperature (i.e. not in a fridge), to prevent re-precipitation, and must be transfused within four hours. Transfuse using a standard blood giving set with a 170-200 micron filter. The typical infusion rate is 10-20mL/kg/hr (30-60 min per five pool unit).

**Please note**

In September 2019, SaBTO withdrew the requirement to import and pathogen inactivate plasma. From April 2020 orders from NHSBT may be fulfilled with either Non-UK (Methylene Blue MB pathogen inactivated) and/or UK plasma and cryoprecipitate until current stocks of imported plasma are depleted.

**Compatibility**

ABO group identical Cryoprecipitate should be given whenever possible; if not possible Cryoprecipitate of a different ABO group may be acceptable (this must be discussed with the hospital transfusion laboratory staff or haematologist).

ABO compatibility for plasma components is different to that of red cells and **Group O Cryoprecipitate MUST only be given to group O recipients.**
Standard Cryo selection for ABO group

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<th>Recipient Group</th>
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**Pooled Group AB Cryo. is in limited supply and only available on a named patient basis.

*Suitable for use in adults if negative for high titre anti-A/anti-B (labelled HT-).

MB Cryoprecipitate selection for ABO group

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*MB Cryoprecipitate is not tested for HT antibodies. Group compatible plasma should be used wherever possible. Non-compatible groups should only be used in emergencies when compatible groups are not available.

Group AB cryoprecipitate is haemolysin free and suitable for patients of any ABO group but is in limited supply.

D group

Cryoprecipitate does not need to be matched for D group. D positive plasma components may be given to D negative recipients without the need for anti-D Ig prophylaxis. The EU Blood Directive currently requires that the D group is stated on the label.

If you are unsure about the compatibility of Cryoprecipitate for your patient always check with your hospital transfusion laboratory staff before transfusing.

Specific requirements

Cryoprecipitate has no cellular content and therefore does not need to be irradiated or selected as Cytomegalovirus (CMV) sero-negative.

The use of other frozen components produced is covered in a separate factsheet:

- Standard Fresh Frozen Plasma (FFP).
References:
Joint United Kingdom (UK) Blood Transfusion and Tissue Transplantation Services Professional Advisory Committee Guidelines for blood transfusion services (red Book). Available at: https://www.transfusionguidelines.org/red-book/chapter-7-specifications-for-blood-components/7-15-fresh-frozen-plasma-leucocyte-depleted
NHS Blood and Transplant (2016) Portfolio of components and guidance for their clinical use (specification SPN223/8). Available at: http://hospital.blood.co.uk/products/
Revised advice on vCJD: Risk reduction measures for UK. Available at: https://www.parliament.uk/business/publications/written-questions-answers-statements/written-statement/Commons/2019-09-09/HCWS1821/

For further information please consult your Hospital Blood Transfusion Policy, contact a member of your Hospital Transfusion Team or visit: https://hospital.blood.co.uk/

NHS Blood and Transplant (NHSBT) saves and improves lives by providing a safe, reliable and efficient supply of blood and associated services to the NHS in England. We are the organ donor organisation for the UK and are responsible for matching and allocating donated organs. We rely on thousands of members of the public who voluntarily donate their blood, organs, tissues and stem cells.

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